In the Claims

1.-16. (Cancelled)

17. (Currently Amended) A method of treating a mammal with melanoma by decreasing the number of intratumoral vessels, or inhibiting the formation of new intratumoral vessels comprising administering by:

a) injection of a therapeutically effective amount of an expression plasmid comprising a polynucleotide coding for a therapeutic peptide consisting of SEQ ID NO: 2 absent any operably linked coding sequence, wherein the polynucleotide sequence is operably linked to a promoter or expression control sequence, in the tumor of the mammal having a tumor followed by application of electric pulses to the site of injection in the tumor of the mammal; or

b) injection of a therapeutically effective amount of an expression plasmid comprising a polynucleotide coding for a therapeutic peptide consisting of SEQ ID NO: 2 absent any operably linked coding sequence, wherein the polynucleotide sequence is operably linked to a promoter or expression control sequence, in a muscle of the mammal having a tumor followed by application of electric pulses to the site of injection in the muscle of the mammal;

whereby the number of intratumoral vessels, or formation of new intratumoral vessels is decreased and melanoma in the mammal is treated.

18.-20. (Cancelled)

21. (Currently Amended) A method of treating a mammal with pulmonary metastases by decreasing the number of intratumoral vessels, or inhibiting the formation of new intratumoral vessels comprising administering by:

~~a) injection of a therapeutically effective amount of an expression plasmid comprising a polynucleotide coding for a therapeutic peptide consisting of SEQ ID NO: 2 absent any operably linked coding sequence, wherein the polynucleotide sequence is operably linked to a promoter or expression control sequence, in the tumor of the mammal having a tumor followed by application of electric pulses to the site of injection in the tumor of the mammal; or~~

~~b)~~ injection of a therapeutically effective amount of an expression plasmid comprising a polynucleotide coding for a therapeutic peptide consisting of SEQ ID NO: 2 absent any operably linked coding sequence, wherein the polynucleotide sequence is operably linked to a promoter or expression control sequence, in a muscle of the mammal having a tumor followed by application of electric pulses to the site of injection in the muscle of the mammal;

whereby the number of intratumoral vessels, or formation of new intratumoral vessels is decreased and the pulmonary metastases in the mammal are treated.

22.-26. (Cancelled)

27. (Previously Presented) The method according to claim 17, wherein said polynucleotide sequence consists of SEQ ID NO: 1.

28. (Previously Presented) The method according to claim 17, wherein said expression plasmid coding for the therapeutic peptide consisting of SEQ ID NO: 2 is administered by injection in said muscle of the mammal with melanoma followed by application of electric pulses to the site of the injection in said muscle of the mammal with melanoma.

29. (Previously Presented) The method according to claim 21, wherein said polynucleotide sequence consists of SEQ ID NO: 1.

30. (Cancelled)